ENVIRONMENTAL CHEMISTS

Date of Report: 06/10/98 Date Received: 06/04/98

Project: Metro Self-Monitor, PO# M11278

Date Samples Extracted: 06/05/98 Date Extracts Analyzed: 06/09/98

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, ZINC USING METHOD 6010

Samples Processed Using Method 3005A Results Reported as mg/L (ppm)

| Sample ID | | <u>Chrom</u> | ium <u>C</u> c | opper l | <u>Nickel</u> | Zinc |
|------------|------------------------|--------------|----------------|---------|---------------|--------|
| M11278 | | 0.82 | 2 (|).44 | 0.87 | 0.09 |
| | | | | | | |
| Method Bla | $\mathbf{n}\mathbf{k}$ | <0.08 | 5 <0 | 0.05 | <0.05 | < 0.05 |

ENVIRONMENTAL CHEMISTS

Date of Report: 06/10/98 Date Received: 06/04/98

Project: Metro Self-Monitor, PO# M11278

QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 805133-01 (Duplicate)

| | | | | Relative | | |
|----------|------------|--------|-----------|------------|------------|---|
| | Reporting | Sample | Duplicate | e Percent | Acceptance | |
| Analyte | Units | Result | Result | Difference | Criteria | |
| Chromium | mg/L (ppm) | 0.40 | 0.41 | 2 | 0-20 | • |
| Copper | mg/L (ppm) | 0.26 | 0.27 | 4 | 0-20 | |
| Nickel | mg/L (ppm) | 0.37 | 0.37 | 0 | 0-20 | |
| Zinc | mg/L (ppm) | 0.06 | < 0.05 | nm | 0-20 | |

Laboratory Code: 805133-01 (Matrix Spike)

| | Reporting | Spike | Sample | % Recov | ery % Recov | ery Acceptant | ce |
|----------|------------|-------|--------|---------|-------------|---------------|-----|
| Analyte | Units | Level | Result | MS | MSD | Criteria | RPD |
| Chromium | mg/L (ppm) | 5 | 0.40 | 95 | 97 | 80-120 | 2 |
| Copper | mg/L (ppm) | 5 | 0.26 | 97 | 101 | 80-120 | 4 |
| Nickel | mg/L (ppm) | 10 | 0.37 | 99 | 98 | 80-120 | 1 |
| Zinc | mg/L (ppm) | 5 | 0.06 | 95 | 93 | 80-120 | 2 |

Laboratory Code: Laboratory Control Sample

| Reporting | Spike | % Recovery | % Recovery | Acceptance | |
|---------------------|-------|------------|------------|------------|-----|
| Analyte Units | Level | LCS | LCSD | Criteria | RPD |
| Chromium mg/L (ppm) | 5 | 96 | 96 | 80-120 | 0 |
| Copper mg/L (ppm) | 5 | 104 | 102 | 80-120 | 2 |
| Nickel mg/L (ppm) | 10 | 99 | 102 | 80-120 | 3 |
| Zine mg/L (ppm) | 5 | 93 | 95 | 80-120 | 2 |

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

| 3012 !6th Avenue West Seattle, WA 98119-2029 | | | | | Ì | 1.00 20 | |
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| City, State, Zip Sent | 110000 | 98134 | , | | | | |
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ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

June 10, 1998

DUPLICATE COPY

INVOICE #98ACU0610-1

Accounts Payable Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

RE: Project Metro Self-Monitor, PO# M11278: Results of testing requested by Gerry Thompson for material submitted on June 4, 1998.

FEDERAL TAX ID (b) (6)

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

June 10, 1998

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on June 4, 1998 from your Metro Self-Monitor, PO# M11278 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Manuel Marti Project Manager

Enclosures ACU0610R.DOC